Serial No.: 10/598,906

Filed: September 14, 2006

Page : 2 of 7

Please amend the claims as follows (this listing of claims replaces all prior versions):

1. (Cancelled)

2. (Currently amended) The electrical connector detonator assembly of claim [[1]] 37,

wherein said first end and second end [[parts]] that emerge from said plug member,

emerge on opposite sides thereof.

3. (Currently amended) The electrical connector detonator assembly of claim 37 [[40]],

wherein [[each]] the first end comprises a wire clasp or crimp for grasping the end of a

wire emerging from the signal transmission line.

4. (Cancelled)

5. (Currently amended) The electrical connector detonator assembly of claim [[1]]37,

wherein said at least one bridge element comprises a metal, a metal alloy, a ceramic, a rigid

polymer, or a semiconductor.

6. (Currently amended) The electrical connector detonator assembly of claim 5, wherein

said at least one bridge element consists of a metal and is formed by stamping a template from

sheet metal.

7-14. (Cancelled)

15. (Currently amended) The electrical connector detonator assembly of claim

[[1]]37, wherein the plug member includes a portion adapted to extend into and frictionally

engage with an internal surface of a the detonator shell of the detonator at said opening thereof.

Serial No.: 10/598,906

Filed: September 14, 2006

Page : 3 of 7

16. (Currently amended) The electrical connector detonator assembly of claim [[1]]37, wherein the plug member further includes an annular recess to receive a detonator crimp, thereby to secure said plug member at said opening of the detonator shell.

17. (Currently amended) The electrical connector detonator assembly of claim [[1]]37, wherein the plug member includes a threaded portion for threaded engagement with an internal surface of the detonator shell at said opening thereof.

## 18. (Cancelled)

- 19. (Currently amended) The electrical connector detonator assembly of claim [[1]]37, further comprising a sheath element for sheathing at least one on electrical connection between said signal transmission line and said at least one bridge element, the sheath element comprising:
- (a) an elongate body adapted for association at one end thereof with the electrical connector; and
- (b) a longitudinal bore extending therethrough for receiving the signal transmission line and at least a portion of each bridge element.
- 20. (Currently amended) The electrical connector detonator assembly of claim 19, wherein the sheath element is at least partially made of a flexible material.
- 21. (Currently amended) The electrical connector detonator assembly of claim the 19, wherein the sheath element is adapted for releasable engagement with the electrical connector such that the sheath element can be selectively disengaged from the electrical connector to expose said at least one bridge element and/or said at least one electrical connection.
- 22. (Currently amended) The electrical connector detonator assembly of claim 19, wherein the sheath element is permanently fixed to the electrical connector.

Serial No.: 10/598,906

Filed: September 14, 2006

Page : 4 of 7

23. (Currently amended) The electrical connector detonator assembly of claim 19, wherein the sheath element and the electrical connector are unitary in construction.

- 24. (Currently amended) The electrical connector detonator assembly of claim 19, wherein the sheath element further comprises one or more transverse ridges along the body to impart flexibility to the sheath element.
- 25. (Currently amended) The electrical connector detonator assembly of claim 19, wherein the sheath element further comprises a flex point defined by a narrow portion of the elongate body.
- 26. (Currently amended) The electrical connector detonator assembly of the claim 21, wherein the releasable engagement is provided by a friction fit or an interference fit.

## 27-34. (Cancelled)

35. (Currently amended) The <u>detonator</u> assembly <u>according to of</u> claim [[34]] <u>37</u>, wherein said at least one electrical component is selected from the group consisting of: a printed circuit board or a component thereof, means to allow protection from electrostatic damage to other electronic components of the detonator, a resistor, a varistor, a zener diode, a suppressor diode, an encapsulated integrated circuit, and SO8 packaging, a filter, a capacitor, a spark gap, a small outline integrated circuit, and a rectifier;[[,]] or alternatively said electrical component is connected to a printed circuit board or a component thereof, means to allow protection from electrostatic damage to other electronic components of the detonator, a resistor, a varistor, a zener diode, a suppressor diode, an encapsulated integrated circuit, or an SO8 packaging, a printed circuit board or a component thereof, a resistor, a filter, a capacitor, a spark gap, or small outline integrated circuit, or a rectifier.

Serial No.: 10/598,906

Filed: September 14, 2006

Page : 5 of 7

36. (Currently amended) The <u>detonator</u> assembly <u>according to</u> of claim [[34]]37, wherein said at least one bridge element is soldered to at least one circuit element of a printed circuit board.

- 37. (Currently amended) A detonator assembly comprising:
- a detonator comprising:
- a detonator shell including a percussion-actuation end and an opening at an end opposite said percussion-actuation end;
  - a base charge adjacent the percussion-actuation end of the shell; and initiation means;

wherein the detonator assembly further comprises an electrical connector for secure retention of a signal transmission line to the detonator and comprising:

a body of electrically insulating material adapted to form a plug member for said opening of said detonator shell;

at least one bridge element comprising electrically conductive material extending through said plug member and having a first end and a second end that emerge from said plug member; and

retaining means for retaining said at east one bridge element in said plug member to cause said at least one bridge element to resist slippage between said at least one bridge element and said plug member;

said electrical connector being the assembly of claim 34, fixed to said detonator shell at least in part by securing said plug member to said opening, said at least one electrical component being retained with the detonator shell, said first end of said at least one bridge element including a part that emerges emerging from said plug member and extending away from said detonator shell for electrical contact with a signal transmission line within said shell for electrical contact with said at least one electrical component and a part that said second end emerges emerging from said plug member within said detonator shell and in electrical contact with at least one electrical component of the detonator and extends away from said shell for electrical contact with a signal transmission line; and

Serial No.: 10/598,906

Filed: September 14, 2006

Page : 6 of 7

the imitation means being associated with said at least one electrical component for transfer of one or more appropriate initiation signals to the base charge for actuation thereof in response to appropriate the signal(s).

38-41. (Cancelled)